DOCUMENT RESUME

ED 130 954 SO 009 533

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TITLE The Kinder-Economy: A Case Study of Kindergarten Pupils' Acquisition of Economic Concepts.
PUB DATE Sep 76
NOTE 25p.; Paper presented at national convention of Allied Social Science Associations (Atlantic City, New Jersey, September 16-18, 1976)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Case Studies (Education); Comparative Analysis; Concept Formation; *Concept Teaching; Data Analysis; Early Childhood Education; *Economic Education; Economics; *Educational Research; Elementary Secondary Education; *Instructional Innovation; *Learning Experience; Primary Education; Simulation; Statistical Analysis; *Teaching Methods

ABSTRACT

The Kinder-Economy, a teacher-guided program which introduces basic economic concepts to primary children through an action/simulation/participation program, is discussed. The experimental program is based on the belief that young children can identify and comprehend economic concepts and apply them to real situations in their own milieu. Throughout one semester, the teacher follows a sequence of experience, debriefing, and reinforcement in teaching nine decision-making and analytical concepts: scarcity, cost-benefit analysis, production, specialization, consumption, distribution, exchange, market survey, and present versus deferred gratification. Methods and results of a study are described in which four questions were explored: (1) does instructional intervention or increased maturity over time promote a child's success in economic decision making and analysis; (2) to what extent does instructional intervention allow children to master concepts that they are considered too young to learn; (3) what types of school, home, and personality variables predict success in economic understanding; and (4) what are parents' attitudes toward primary-level economic education. Results showed that instructional intervention and positive parent attitude help children master economics. (AV)

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THE KINDER-ECONOMY: A CASE STUDY OF KINDERGARTEN PUPILS' ACQUISITION OF ECONOMIC CONCEPTS

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Who is economically literate? Certainly not the young couple who took a second mortgage on their home at an 18 per cent annual interest rate. Nor the black consumers in a low-income neighborhood who unknowingly are paying 2¢ to 20¢ more per grocery item than their counterparts in a more affluent area. Nor the 75 per cent of students in 13,000 sampled junior high schools throughout the United States who, in a recent survey by the Joint Council on Economic Education, were unable to differentiate between statements describing a capitalistic economy and a socialistic economy. Surely not the average U.S. citizen who, in another survey by the same Council, thought that the typical business made a profit of 50 per cent or more on its investment. [1]

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At what point, then, must educators begin to take action to create a population of economically literate citizens? Kindergarten is not too soon! A primary education program, developed by the author[2] and piloted throughout California, has taken this vital first step. The Kinder-Economy is a teacher-guided program which introduces basic economic concepts to primary children through an action/simulation/participation program. It is based on the following three precepts:

1. It is an important goal of education to increase the decision-making

skills of children at the earliest possible age.

2. Children should be allowed to make a decision when they are able and willing to bear the consequences of their decisions.

3. Sound, long-run decisions are as important to child development as short-run decision making -- children should experience the costs and benefits of present versus deferred gratification.

While most educators hold economics to be a subject suitable only for high school or college study, the results of the current pilots in Kinder-Economy are indicating that young children can identify and comprehend scarcity, supply, demand, opportunity cost and other related economic concepts; additionally, they are able to apply these concepts to the real situations with which they must deal in their own milieu. Other materials have been published which introduce children to these concepts, but do not go beyond the recognition level to the application and analysis level as does this program.

The Kinder-Economy, a close cousin of its forerunner, the Mini-Society,[3] is a set of sequential experiences emphasizing those decision-making concepts related to the real and economic world. The program is designed to be implemented 30 minutes a day for a semester. Like its cousin, it is predicated on the educational philosophy of experienced-based instruction.

1. The children first experience and live with the repercussions of the concept to be emphasized. For example, they may be exposed to a number of scarcity situations until each child is able to recognize and identify as scarcity that which he or she is experiencing.

2. The teacher then debriefs the scarcity situations and helps the children

to identify the concept they have experienced, and to suggest possible solutions to the problems they have encountered.

3. The teacher then reinforces the experiences through games, learning centers, worksheets, and sometimes filmstrips. For example, a concentration-type matching game may be developed in which the children identify scarcity situations.

An important characteristic of the program is the three-stage sequence the teacher must follow with respect to the teaching of the nine economic decision-making and analytical concepts of the Kinder-Economy: (1) the Experience, (2) the Debriefing, and (3) Reinforcement. While the first requirement of the implementation of the Kinder-Economy clearly follows the concepts of Dewey, his philosophy would also embrace the second and third. However, most of his followers implemented Dewey models utilizing only Step 1 -- the experience phase. This is equivalent to assuming that a child understands business and economic interrelationships through the sole experience of having played the game "Monopoly." Is it any wonder that Dewey disclaimed most of his followers before he died?[4]

In brief, the Kinder-Economy works as follows. Children experience situations in their classrooms which they later can identify as scarcity in debriefing sessions. The concept is reinforced through bulletin boards, games, homework, role play, or learning centers. (Each of the concepts which follow can be reinforced through all or a combination of these and other activities.)

The concept of opportunity cost is introduced as children identify alternatives involved in decisions they make within the school situation, such as which

of two activities to participate in, or which supplies to use to create something. They use cost-benefit analysis as they evaluate whether they made a "good" decision.

Once these first concepts are understood, Kinder-Economy children proceed to work together. They combine resources to produce something, whether a good or a service, and then begin to internalize the new concepts of production and specialization through this collaborative experience. In addition, the Kinder-Economy children begin to identify substitutes and complements.

Production becomes a "real world" experience as children specialize to perform classroom tasks for which they are paid in classroom currency. Generally, a banking function is instituted at this point, that can be serviced by teachers or parent volunteers. Having experienced the concepts of production and specialization, they are ready to identify the concept of consumption as they buy goods or services using the income they have earned. And they are prepared to comprehend the concept of distribution.

Role play and simulation are an important part of helping children define the concept of distribution as it permits them to experience several possible ways of rationing goods and services and to debate informally the advantages and disadvantages of each.

With distribution and consumption concepts understood and practiced, Kinder-Economy children are given the opportunity to experience the concept of exchange for goods and services they have produced. Both money and barter as forms of exchange are introduced and compared. Once exchange has been comprehended, the class as a unit is ready to act as a corporation that

will produce for a particular market, such as "hungry parents on open house night."

Starting with a market survey as a basis for deciding what and how much to produce, proceeding through the investment of a small amount of capital and on to the actual production and sale of a product and the distribution of revenue, the children have lived through the steps of a business venture. They are then given a choice of taking their money home or investing in a new, higher risk business venture. Through this experience, they are introduced to present versus deferred gratification.

In sharp contrast to upper elementary children, who as Mini-Society citizens consider their classroom -- as opposed to the outside world -- to be their society, the Kinder-Economy children are too young and egocentric to perceive themselves as part of a society. To the Kinder-Economy child, the society equals the individual and each experience is largely perceived as unique to himself or herself.[5]

While recent interest in early childhood programs has opened doors to the learning of more "content" at a younger age, developmental psychologists still tend to view the primary child as having a limited capacity for concept acquisition. Piagetian theory would indicate that sophisticated concept formation could not take place in the mind of the average child until about the third grade. Piaget's work typically shows that all problem solving in primary grades evolves through trial and error situations rather than through the internalization of concepts and the rationalization of a logical solution based on those concepts.[6] The Kinder-Economy program would tend to present conflicting

evidence, showing that the abstract process of decision-making through rationalization is indeed accomplished by five and six year-olds. At the comprehension, application, and analysis levels, the children were able to successfully deal with the nine economic decision-making concepts covered by the program.[7]

Problem

The purpose of the study to be reported was to determine the following.

1. Is the child's success in economic decision-making and analysis a function of instructional intervention or increased maturity inherent in the passage of time?
2. To what extent and degree, through instructional intervention, are children able to master concepts that, developmentally, they are considered too young to learn?
3. What type of school, home, and personality variables are predictors of success in economic decision-making and analysis? For example, does initiative predict success in economic decision making? What part is played by the parents in their day-to-day discussions with their child of his or her economic activities?
4. What are the parents' attitudes toward the teaching of economic decision-making and analytical principles as a part of early childhood education?

Methodology

Subjects. The study included 96 subjects from five kindergarten classes in a metropolitan area. The pupils ranged in age from five to six, the majority of whom were five. They were from middle class backgrounds and approximately

50% had some nursery school background. The teachers of the five classes were randomly selected from a group of 92 applicants, and prior to starting the program were trained in a workshop on economic education. Because we were so sure that kindergarten children had not been exposed anywhere to economic concepts, all other kindergarten classes could have been considered our control groups. However, in the interest of scientific purity, we selected four specific control group classes. Thus, we hoped to show that the learning that might result from the treatment -- the instructional intervention -- was due to the treatment rather than to unknown effects inherent in the passage of time.

For two of the schools, we were able to utilize a control group from another kindergarten in the same school. In the other two cases, there was no other kindergarten in the same school so kindergartens from a neighboring school with a slightly higher socioeconomic background were chosen to serve as the control group.

Instrumentation

When the program had been completed, a test was utilized which examined the pupils' comprehension of the following concepts, clusters, and principles: (1) scarcity; (2) decision-making: opportunity cost and cost-benefit analysis; (3) production; (4) specialization; (5) distribution; (6) consumption and saving; (7) exchange -- money vs. barter; (8) demand and supply; and (9) business organization and business venture.

There were usually three to five questions per concept at the comprehension

or application or analysis level of the cognitive domain. Twenty percent of the questions were at the analysis level, and sixty percent of the questions tested application skills. Analysis in this instance may be defined as the process of separating into component parts a whole, such as a mathematical or social problem, a painting, or a scientific phenomenon or object. Application indicates that a pupil knows the appropriate fact, skill principle, or method to use in a situation. For example, when a pupil is given a problem that is new to him or her, (s)he applies the appropriate abstraction without prompting. If a student understands a concept at the comprehension level, (s)he can isolate the main idea and how the details relate to one another.[8] The test was analyzed and found to possess content and construct validity.

A second measure partially observational in nature was designed to test the children's personal characteristics in order to ascertain whether any of these characteristics are predictors of economic decision-making competencies. These included verbal-nonverbal, high-low ability, mature-immature, social-nonsocial, and high-low initiative.[9] The teachers had some data which guided them in the making of these judgments; they also had the assistance of trained teachers' aides to help them rate the children on each of the variables. According to a Spearman Rank-Order Correlation test, the interscorer reliabilities in each class were 80% or higher. The scores ranged from 5 to 1. Five indicated highest degree of the measure; a score of one, the lowest.

A third measure, a parent attitude survey, was also utilized to determine whether parents had positive attitudes toward the teaching of economics to their five and six-year-olds. Also, we were interested in learning to what extent

dialogue instigated by the child with the parents about economics was a predictor of economic comprehension. This variable was called a parent report.[10]

We were also interested in learning whether the fact that a pupil's sibling participated in a Mini-Society program was a predictor of economic success in the Kinder-Economy, since dialogue on economic matters and concepts was most likely to occur under those circumstances.

Procedure

Program implementation by the teachers in the experimental groups did not begin until (1) each one had attended a 30-hour workshop on Kinder-Economics, and (2) each had been tested on the nine economic-concept clusters relevant to the Kinder-Economy program, demonstrating competency in the program at or above the 80 percent level.

The first two stages of the program were implemented by all teachers, each of whom had pictures taken of the pupils interacting with other pupils. When the first two stages were completed, parents were invited to an orientation in which the goals and characteristics of the Kinder-Economy program were explained. They were also shown slides of their children interacting with other children during the course of the first two stages of the program.

The teaching sequence progressed as described earlier in this report. At the end of the semester, each child in both the experimental group and in the control group was tested on their comprehension of the nine economic concepts. Parents who had teaching credentials and/or teaching experience, and who were currently helping as teacher aides in the classrooms, were trained to

administer the test. Since the concentration span of five- and six-year-olds is low, each child was tested orally and individually over four periods. The forms for the parent survey were sent home to them one week prior to the test. Also, the teachers' and teacher aides' observation forms were filled out prior to the test.

Results

1. Treated vs. Control Comparisons (Study Question 1). The initial analysis was directed toward answering the question of whether a significant difference existed between children receiving the Kinder-Economy and those who received no additional training in the material. Since classrooms, rather than children, were sampled, the analyses were performed utilizing the classroom as the unit of analysis. Table 1 summarizes this endeavor. A substantial difference between the two groups was found, in spite of the fact that some control pupils had an advantage in that they were members of families classified as "higher" in socioeconomic status. Utilizing the total score of the criterion test as the observed variable, a t-test was computed yielding a significant value of 6.55 ($p < .05$). These results tend to rule out maturation and other unknown effects in the passage of time as determinants of mastery of the Kinder-Economy curriculum.

2. Mastery of Kinder-Economy Concepts (Study Question 2). Table 2 depicts means, standard deviations, and levels of mastery attained by the sample for study question 2. Results are also broken down by sex.

Four of the nine areas covered by the examination yielded mastery levels

of at least 70 percent. These were (1) scarcity/economic problems, (2) decision-making and cost-benefit analysis, (3) production, and (4) business organization. The highest level of mastery was found for the content contained in the scarcity and economic-problems unit (83.2).

Five of the nine areas achieved mastery levels of less than 70 percent. The most difficult area to master appeared to be that of specialization. Total score results indicate mastery at the level of 72.5 percent. Thus, although children were able to learn certain concepts better than others, their overall scores revealed that, in general, they had mastery of the Kinder-Economy concepts utilizing a 70 percent definition of mastery.

Interestingly, boy-girl differences were found to be minimal. A t-test computed on the total score analyzing possible differences between the two groups produced a t-value of 0.47, which was statistically insignificant. Although analyses were not performed for each cognitive area within the test, Table 2 indicates that boys scored slightly higher than girls on the concepts of decision-making / cost-benefit analysis, production, specialization, distribution, consumption and savings, and business organization. Girls scored higher than boys in the areas of scarcity/economic problems and money & barter. Differences between boys and girls were so slight that it is doubtful that they would be statistically significant.

3. Predictors of Success in Economic Analysis and Decision-Making (Study Question 3). In study question 3, it was stated that we were interested in the ability of certain home, school, and personality variables to predict successful mastery of the Kinder-Economy curriculum. Toward this objective, a multiple

regression solution was executed utilizing parent report, verbal ability, maturation level, general ability, social ability, and initiative as potential predictors. Since the magnitude of the total score was not significantly different for boys and girls, sex was omitted as a predictor. Also, the presence or absence of siblings belonging to a Mini-Society was omitted as a predictor because data available for inclusion represented less than 50 percent of the sample. It should be noted, however, that results of a t-test comparison of total score, utilizing this variable to group children, resulted in a t-value of -8.56, which was significant beyond the .05 level. Findings indicated that children with siblings in the Mini-Society produced significantly higher scores (32.50 vs. 24.19). Thus, although not utilized as a predictor in the present study, this Mini-Society variable does appear to relate positively to successful mastery of the Kinder-Economy program concepts.

Table 3 depicts mean scores obtained for the predictor variables. All measures had a range of 1-5. The highest score for the group was obtained for parent report, 3.74; lowest found was that for initiative, 2.97. The group of six predictors was entered into the solution in a step-wise manner in direct order of their predictive ability with respect to the dependent variable -- the total test score. The results of this analysis are summarized in Table 4.

Overall results indicated that the combined six predictors accounted for 75 percent of the total variance in the total score of the experimental group. The single most powerful predictor was parent report, which accounted for 62 percent of the total variance. Little precision in prediction is gained with the addition of general ability, social ability, and initiative in the equation. Thus,

three variables appear to be excellent predictors of success in economic decision making and analysis: parent report, verbal ability, and maturation.

4. Parents Attitude Toward the Teaching of Economics (Study Question 4). We were interested in ascertaining whether parents of children participating in the Kinder-Economy had positive, negative, or neutral attitudes toward the teaching of economics at the kindergarten level. The parents were asked to answer yes or no to the following five questions:

1. Do you believe economics should be taught in kindergarten and/or first grade?
2. Is your child presently participating in a kindergarten or first-grade economics program?
3. Are your children using economics in their decision-making at home (making decisions in terms of what they are getting versus what they are giving up -- weighing the alternatives foregone against the benefits received)?
4. When they are at home, do your children ever talk specifically about the economics they are learning at school?
5. Do you believe an economics program should be continued throughout the rest of the grades?

Parents' responses to these questions are presented in Table 5. The highly positive responses of the parents are most encouraging to those who believe that economics should be emphasized through the K-12 curriculum

Discussion

Four areas of discussion were addressed by the present study. First, was the success in economic decision-making and analysis achieved by the children in the experimental groups a function of instructional intervention or of increased maturity inherent in the passage of time? The results obtained seem to indicate that the childrens' understanding of economics was most likely related to the instructional intervention inherent in the Kinder-Economy program. Although some economists believe that the "ultimate comprehension" of economics is largely intuitive, this intrusion seems not to have surfaced among the kindergarten children used in either the experimental or the control groups. If indeed we do believe that it is important for children between the ages of five and six to understand economics, we have learned from the present study that the simple process of maturation is not going to insure their assimilation of its major principles. The Kinder-Economy program may well be one of several instructional interventions in the teaching of economics that can result in increased early mastery; but whatever the system, instructional intervention appears to be a necessary requisite to accomplishing economic understanding in young children.

Second, to what extent and degree through instructional intervention are children able to master the concepts that, developmentally, they are considered too young to learn? Before discussing this area, I would like to call your attention to the response by the children to the following question:

When father washes the dishes and brother dries them, are they:
(1) dividing the labor (specializing)?
(2) producing a good?
(3) wasting valuable time?

As noted, the majority of boys and girls chose option "c". It is possible to speculate that they missed the question because the economic concept involved was, essentially, too complex for them to understand; on the other hand, does this response show that sexist attitudes in boys and girls are already established in kindergarten?

Similarly, it is interesting that despite the low scores when asked to identify "specialization," and despite an economics mastery level of less than 70% in four other of the nine areas questioned, the results indicated that the childrens' economic-literacy level after completing the Kinder-Economy program was four percent higher than the one manifested by their teachers. This is particularly interesting when it is remembered that these results were computed before the teachers attended the Kinder-Economy economic education workshop. The comparative results follow: children, 72.5%; teachers, 68.5%. These percentages would suggest that if society is truly concerned about economic problems and hopes to solve such crises as gas shortages, meat shortages, inflation, etc., a citizenry educated in economics might have to be the first step. It has always been a personal source of mystery why all students, in every state of the union, are required to demonstrate knowledge of U.S. Government in order to graduate from high school, but no such requirement (with very few exceptions) applies to demonstrating a knowledge of our economic system. The rationale for the U.S. Government requirement is that to be able to make intelligent political decisions and possibly to improve one's government, it is imperative to understand how the political system works. As an economist and educator, I believe this rationale applies equally to understanding

our economic system. Numerous political decisions have underlying economic consequences. Economic naivete can make a citizen with a thorough understanding of government vote for a candidate who promises in his/her campaign to cure inflation, reduce taxes, follow an easy-money policy and balance the budget. This kind of economic illiteracy has frequently been demonstrated by otherwise intelligent people, who doubtlessly have faith and sincerely believe that such goals are simultaneously attainable. It has already been demonstrated that economic literacy is an achievable goal and <u>can</u> be demonstrated even as early as kindergarten. The voting population, and in particular the education specialists, must now determine whether economics <u>should</u> be taught prior to high school and college, and to what extent a curricular commitment is to be made.

The fact that "parent report" accounted for 62% of the variance adds data to the already existing evidence that much of what a child learns about school subjects can be attributed to home factors -- the dialogue between parent and child, for example. The area of economics provides a unique opportunity for parents to discuss with their child a school subject that permeates their very existence. Some parents with additional children in school reported that the only school subject matter they felt qualified to discuss was economics. Since the study just completed shows that these reported interactions with their children turned out to be the highest predictor of economic mastery, these parent-child discussions may well have contributed to economic knowledge. One might wonder who was teaching whom. Some of the parents commented that they found

it embarassing to discover their five or six-year-olds more knowledgeable in economics than they; the result was that parents reportedly endeavored to increase their own knowledge.

This last finding would indicate that, aside from the fact that an economics program for very young children can be considered educationally meritorious, it can also be a common subject of mutual interest between parent and child. The interaction that follows, occurring in a positive setting at this very early stage in the child's schooling, might establish a strong parent/child interaction pattern that could continue throughout school and expand into other subjects and areas as well.

The child's alleged and observed classroom interest and parent report were often incongruous. Some children who appeared especially interested in Kinder-Economy activities within the classroom had a 1 and 2 rating, whereas others who often appeared disinterested were reported to talk at home of "nothing else but Kinder-Economy" and had ratings of 5. Thus, "parent report" seems to be "more" than just a measure of the child's observed or even asserted interest. The fact that "verbalness" regarding economics in the home was a predictor of economic mastery is consistent with this finding of "parent report;" a child is more likely to manifest his or her interest in economics via dialogue if the child is verbal.

Another interesting result is the fact that the "parent report" was found to be consistent with the finding that children with older brothers and sisters in the Mini-Society program scored significantly higher than those who did not have siblings in an economic program. The older child is probably eager to add

his/her knowledge to the home dialogue among parents and children.

Fourth, what are the parents' attitudes toward the teaching of economic decision making and analytical principles as a part of early-childhood education? The study found the parents' attitude highly positive. This was particularly rewarding in light of my belief that parents as well as educators and other professionals should have a voice in curricular decision making.

Note that the survey found almost 97 percent of the parents believed that economics should be taught in kindergarten, 97.8 percent were cognizant of the fact that their child was in such a program, and 91.3 percent believed that an economic program should be continued throughout the rest of the grades. If these parents represent the attitude of others throughout society, and economics is brought into the curriculum at all grades -- beginning with kindergarten -- we may yet achieve a satisfactory level of economic litaracy in the United States.

FOOTNOTES

1. Porter, S., Illiterate Economically. Desert News, April 25, 1975.

2. Kourilsky, M., Beyond Simulation: The Mini Society Approach to Economics and Other Social Sciences. California: Education Resource Associatiates, 1974.

3. Kourilsky, M., Ibid.

4. Dewey, J., Criteria of Experience. Experience and Education. New York: Collier Books, 1963, pp. 33-50.

5. Kourilsky, M., Op. Cit., pp. 57-65.

6. Piaget, J., and Barbel, I., The Psychology of the Child. New York: Basic Books, 1969.

7. Bloom, B.S. (ed.), Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook I: Cognitive Domain. New York: David McKay Company, 1956.

8. "Analysis" is a higher level than "Application," Application is a higher level of cognition than "Comprehension," and "Comprehension" is higher than "Recall."

9. "Verbal" is being able to express precisely a personal perception of a given event or situation; i.e., a successful communication process; what is conveyed is intended. "Ability" is the potential to achieve an individual or group objective as well as success when judged in terms of others. "Mature" refers to a state of development -- to be able to rationally weigh the advantages vs. disadvantages of a social moral in order to reach a personal conclusion as to the value of that moral; i.e., "cope with society." Social" includes responding to people publicly, being friendly, seeking new companions in addition to present ones, joining a group situation and getting along with others. "Initiative" includes the motivation to begin work independently, to take the first step, to be adventurous and to be willing to try new methods. The raters, (teacher and teacher's aid) were asked to "rate each child in your class on the above five variables in terms of all other children of comparable age/grade level in your professional experience." Five indicated the highest level and one the lowest -- e.g., 5 = very mature and 1 = very immature.

10. "Parent report" refers to a survey in which parents were asked to rate their children on a 5 to 1 scale on the degree to which their child was talking about economics at home as compared with other school subjects, with 5 indicating a lot, 4 somewhat, 2 a little, and 1 not at all.

11. The mastery level of 70% was determined on the basis of the average pretest scores attained by elementary-school teachers on the same test. The 40 teachers, who were attending an economic education summer workshop, averaged 68.5% on the same test that Kinder-Economy children were later to average 72.5%.

Table 1. Treated vs. Control Comparison --Total Score on Economics Test*

Group	Mean Score	Standard Deviation	t	Number of Classes
Kinder-Economy	25.92	6.61	6.55+	5
Control	8.57	18.99		4

*Total Score = 35

+$p \leq .05$

Table 2
Mean Scores and Standard Deviations
of Kinder-Economy Pupils

Cognitive Unit	Group	Mean Score	Standard Deviation	Per cent of Test Items Mastered	Number of Test Items
Scarcity/ Economics Problems	Total (n=96)	(4.16)*	(1.15)*	(83.2)*	5
	Boys (n=47)	4.09	1.23	81.8	
	Girls (n=49)	4.22	1.07	84.4	
Decision Making/ Cost-Benefit Analysis	Total	(3.22)	(1.08)	(80.5)	4
	Boys	3.28	1.06	82.0	
	Girls	3.16	1.11	79.0	
Production	Total	(3.21)	(0.91)	(80.2)	4
	Boys	3.23	0.98	80.8	
	Girls	3.18	0.83	79.5	
Specialization	Total	(1.24)	(0.68)	(62.0)	2
	Boys	1.28	0.65	64.0	
	Girls	1.20	0.71	60.0	
Distribution	Total	(3.16)	(1.29)	(63.2)	5
	Boys	3.21	1.22	64.2)	
	Girls	3.10	1.37	62.0	
Consumption/ Savings	Total	(2.06)	(1.09)	(68.7)	3
	Boys	2.19	1.06	73.0	
	Girls	1.94	1.13	64.7	
Demand/Supply	Total	(3.22)	(1.40)	(64.4)	5
	Boys	3.23	1.51	64.6	
	Girls	3.20	1.31	64.0	
Business	Total	(3.09)	(1.09)	(77.3)	4
	Boys	3.15	1.06	78.8	
	Girls	3.04	1.11	76.0	
Money & Barter	Total	(2.03)	(1.00)	(67.7)	3
	Boys	2.02	0.97	67.3	
	Girls	2.04	1.04	68.0	
Total Score	Total	(25.39)	(6.01)	(72.5)	35
	Boys	25.68	6.19	73.3	
	Girls	25.10	5.88	71.7	

*( ) refers to statistics for the total group of pupils

Table 3. Mean Scores and Standard Deviations for Predictor Variables

Variable	Mean Score	Standard Deviation
Parent Report	3.74	1.34
General Ability	3.24	1.46
Verbal Ability	3.22	1.42
Maturation	3.18	1.32
Social Ability	3.51	1.18
Initiative	2.97	1.51

Table 4. Summary--Regression Analysis--Overall Sample* (n=94)

Variable Entered	Multiple Correlation Coefficient	R^2	R^2 Change	Simple Correlation Coefficient	Regression Coefficient
Step 1 Parent Report	0.79	0.62	0.62	0.79	2.36
Step 2 Verbal	0.84	0.70	0.08	0.63	0.54
Step 3 Maturation	0.86	0.73	0.03	0.63	0.24
Step 4 Ability	0.86	0.74	0.01	0.66	0.67
Step 5 Social	0.86	0.74	0.00	0.46	0.53
Step 6 Initiative	0.87	0.75	0.01	0.64	0.43
(constant)					8.83

*Dependent Variable = Total Score

Table 5. Parent Attitude Survey (n=92)

Question	Per Cent Yes	Per Cent No
1	96.7	3.3
2	97.8	2.2
3	81.5	18.5
4	85.9	14.1
5	91.3	8.7